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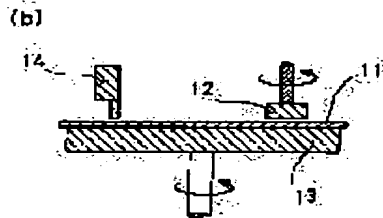
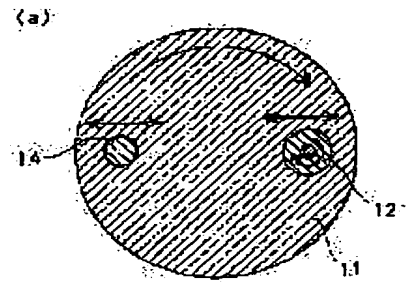
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(54) METHOD FOR FLATTENING SEMICONDUCTOR SUBSTRATE

(57)Abstract:

PURPOSE: To make the surface of a semiconductor substrate flat by grinding a film deposited on the substrate on which an irregular pattern is formed while the thickness of the film is always monitored with a grinding device equipped with a single or plurality of grinding heads which are sufficiently smaller than the substrate.

CONSTITUTION: After sticking a silicon substrate 11 on which a film is deposited after forming an irregular pattern to a substrate holding turntable 13 turning on its axis with the main surface of the substrate 11 up, the main surface of the substrate 11 is ground by moving a grinding head 12 turning on its axis in the radial direction of the head 12 while the head 12 is press-contacted with the main surface. During the grinding operation, the average film thickness of the substrate 11 on its circumference is always monitored with a film thickness measuring device, since the detecting head section 14 of the measuring instrument is controlled so that the section 14 can be always positioned on the same circumference as that of the head 11 on the substrate 11. Film thickness data are sent to a computer and the grinding is carried on toward the central part from the outer peripheral section or toward the outer peripheral section from the central part of the substrate 11 while the position or grinding amount of the head 12 is controlled based on the film thickness data.



LEGAL STATUS

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